

# Notice of Allowability

Application No.

09/648,918

Examiner

Tuan N Nguyen

Applicant(s)

CHEO ET AL.

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/16/2004.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

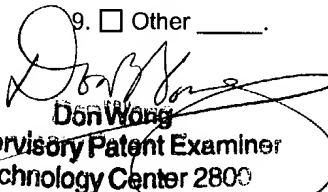
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 040704.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800

### **EXAMINER'S AMENDMENT**

1. The amended claims 1-6 filed on October 21, 2003 have been entered.
2. An examiner's amendment to the record appears below, to the amended claims. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Williams, Melvin Pearson (Attorney for Applicant, Reg. No. 19220) on 04/07/04.

In the claim 14:

- a. Claim 14, line 4, after "each of said", delete -- one or more --, add -- a plurality --;
- b. Claim 14, line 5, after "each of said", delete -- one or more --;
- c. Claim 14, line 6, after "there being", delete -- either --

### ***Drawings***

3. New corrected drawings are required in this application because application has been allowed, see the attached Notice of Draftsperson drawing review.

**REASON FOR ALLOWANCE**

***Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance - Applicant's response filed on 03/16/2004 has been considered, with respect to claims 1, 2, 14 the references of the record fail to teach or suggest:

A clad-pumped, double clad, fiber laser comprising: one or more cores disposed within a pump cladding; each doped with a rare earth lasing ion; each having an oblong cross section; there being either (a) a single core disposed at the center of said cladding or (b) a central core disposed at the center of said cladding and additional cores disposed outwardly of said central core, oriented in an array along a line inclusive of the center of said cladding with long axes of said central core and said additional cores perpendicular to said line and with an equal distance between the centers of adjacent cores; thereby to provide a linearly polarized output laser beam; each of said one or more cores having a mode discriminating core characteristic selected from (c) index of refraction, (d) gain, and (e) cross sectional dimension, said characteristic, in a fiber having a said single core, being greatest at the center of said single core and progressively lower toward the periphery of said single core, said characteristic of said central core, in a fiber having said additional cores, being greater than said characteristic of all others of said cores, said characteristic of each one of said other cores being lower than said characteristic of any of said cores that are closer to said central core than said one of said cores; thereby causing radiation in said cores to phase-lock and transfer laser power coherently into a linearly polarized, bright laser beam of the fundamental in-phase supermode from all higher order supermodes belonging to the same array structure.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

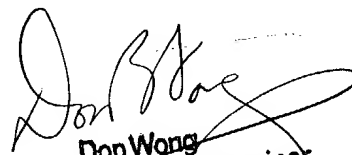
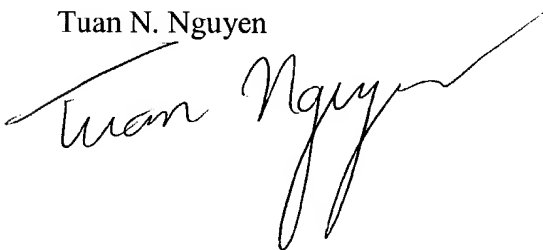
***Communication Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Tuan N. Nguyen



Don Wong  
Supervisory Patent Examiner  
Technology Center 2800